

Birds and Natural History Observations in the Life of William Byrd II of Westover

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Chroniclers of early colonial birdlife included Capt. John Smith, William Strachey, and John Clayton, the Rector of Crofton (Rives, 1890; Allen, 1951; McAtee, 1955a,b). In the historical annals of Virginia ornithology, however, neither naturalists nor ornithologists have accorded much if any attention to William Byrd II of Westover (1674-1744). Dr. William Cabell Rives, in his review of the history of Virginia ornithology (1890), briefly mentioned Byrd's accounts of Passenger Pigeons (*Ectopistes migratorius*) and Carolina Paroquets (or Parakeets, *Conuropsis carolinensis*)¹. J. J. Murray's subsequent treatment of Early Accounts of Virginia Birds (Murray, 1952) repeated Byrd's description of parakeets (see also McKinley, 1978), and in an earlier note (Raven 2 (June): 3, 1932) Murray quoted Byrd's account of the arduous trip through the Dismal Swamp as the dividing line between Virginia and North Carolina was being established.

Since those early brief references to Byrd, more of his writings have been found, in particular several diaries (Wright & Tinling, 1941, 1958; Woodfin & Tinling, 1942; Lockridge, 1987), more accounts of his social, political, and private life (Hatch, 1969; Marambaud, 1971), and a re-examination of the authorship of "William Byrd's Natural History of Virginia" (Adams, 1957, 1962).

The present paper summarizes Byrd's reports of bird observations found in his publications and the now-translated diaries. I have endeavored to locate all of Byrd's references to birds, and have also identified his relationships to contemporary naturalists. Although some people have called Byrd "an amateur naturalist" (Feduc-

cia, 1985), "a backward student of experimental science" (Stearns, 1970), and "at best an enthusiastic . . . amateur naturalist" (Frick & Stearns, 1961), such modern-day labels seem to be unjustified because Byrd's diaries and other works reveal a keen sense for details of animal and bird life styles (see, for example, his accounts of Passenger Pigeons, Carolina Paroquets, Wild Turkeys, beavers, opossums, snakes). Surely, Byrd was intensely interested in plants, especially their medicinal properties, as well as potential agricultural and horticultural benefits. At the same time, his broader interests included natural history aspects of colonial Virginia.

A Brief Biographical Sketch²

The first William Byrd (?-1704) was a successful Virginia planter-trader who accumulated a fortune, possessed large landholdings on the James River and in North Carolina, and established his family as a power in Virginia. At his death, his Virginia landholdings consisted of 26,231 acres including a fine estate at Westover on the James River about 30 miles from Williamsburg. At Westover he erected a wooden mansion in 1690, and soon laid out magnificent gardens for which he imported plants and bulbs from the Old World. The Westover plantation also contained servants' quarters, extensive meadows, and agricultural fields planted mostly in tobacco. He was proud of his friendship with John Banister, the leading naturalist of Virginia at that time. They shared interests in gardening and horticulture.

William Byrd II was born on 28 March 1674 near the falls of the James River where the city of Richmond

¹ Apparently Rives knew only about the Byrd manuscripts written between 1728 and 1736: "History of the Dividing Line," "Journey to the Land of Eden," and "Progress to the Mines."

² Much of the biographical material has been extracted from the books by Bassett (1901), Wright (1940), Hatch (1969), Marambaud (1971), and Lockridge (1987), to which the interested reader is referred for further details of the early Virginia Byrds.

would stand one day. At the age of seven he was sent to London for his education. After a brief apprenticeship with a business firm in England and Holland, he entered the Middle Temple in London for legal training, and qualified as a member of the bar in 1695. At 22 he was elected a Fellow of the Royal Society on 29 April 1696, and soon became the most constant link between the Society and Virginia. In that year he returned to Westover, and, through his father's influence, spent a few months representing Henrico County in the House of Burgesses. He returned to London as an agent of the Virginia Assembly to the Board of Trade, and established himself as a strong advocate for the rights of Virginians. Indicative of his growing interest in Virginia's natural history, at the Royal Society in 1697 he exhibited a rattlesnake and an opossum brought from Virginia, both "Strange creatures" to the Society.

After his father's death in 1704, William took his father's place on the Council of State, became master of Westover, and married Lucy Parke with whom he had four children before she died in 1716. When Lucy's father, Colonel Daniel Parke, died, Byrd assumed his debts, these becoming a financial drain for many years. In 1724, he married Maria Taylor. They also had four children, including William III.

Byrd spent most of the years 1714-1726 in London pursuing his ambition to be made royal governor of Virginia after having openly feuded with Governor Alexander Spotswood, but in 1726 he returned to Virginia to take up again his position on the Council of State and to assume a role as a prominent member of the colony's indigenous political elite. Thereafter Byrd and his fellow members of that elite group steered Virginia with little interference by the Board of Trade in England or the king's governors in the colony.

In 1728, he was chosen to head the Virginia Boundary Commission to survey the dividing line between North Carolina and Virginia. He wrote two accounts of the expedition (see below): a formal document called "History of the Dividing Line betwixt Virginia and North Carolina" (Ruffin, 1841) and a shorter piece, "The Secret History of the Line" which remained unpublished until the 1929 edition of William Boyd. Byrd bought 20,000 acres along the Dan River from one of the North Carolina commissioners, calling it "The Land of Eden." Later he added 110,000 acres to his holdings just south of the North Carolina state line. It was his intention to attract Swiss settlers, a scheme that ultimately failed. In

1736, he headed the commission to survey the Northern Neck, his final service to Virginia beyond his duties as a Councilor, Judge, Colonel of Militia, and trustee of the College of William and Mary.

In "A Progress to the Mines, in the Year 1732," Byrd described a trip to iron furnaces at Fredericksburg, but recorded few natural history observations (Bassett, 1901). Projects then engaging him were schemes to found a city at the falls of the James (which he later called "Richmond") and another at the "Point of Appamattuck River to be named Petersburg" (Bassett, 1901).

He rebuilt Westover into a brick mansion in 1736, imported fine Georgian furniture, cut glass and silverware, and adorned the walls with paintings, among them the portraits of English lords, earls, and dukes. He was a gifted writer, producing volumes of correspondence, some private and some addressing business and public affairs. His library of over 3,600 titles was the largest in the colony, equaled in North America only by that of his New England contemporary, Cotton Mather. William Procter, a Scotsman, was Byrd's librarian. In his time, he was probably the best-read man in Virginia—law, history, travels, medical works, English literature, Bibles in Hebrew, Greek, Latin, French, Dutch, and English, science and mathematics, architecture, Greek and Latin classics, gardening, and agriculture. Byrd's son, William Byrd III, inherited and possessed the library for over 30 years, but after his death his widow was forced to sell it to pay off debts. Other details of the Byrd library can be found in Campbell, 1851; Houlette, 1934; Wolf, 1958; Smart, 1938.

Byrd had an inquiring mind, devoting much time trying to understand natural remedies for human maladies and writing about natural history (e.g., habits of turkeys, beavers). He improved the Westover garden by adding rare flowers from England, bulbs from Holland, and fruit trees. (On 21 May 1711, Byrd found that "the wild pigeons had eaten all the black-hearts [cherries].") Over the years, he sent many roots, seeds, and herbs to Sir Hans Sloane and the Royal Society especially trying to ascertain their curative properties, and Sloane, in turn, encouraged Byrd to use his servants to collect specimens of Virginia natural products. In 1723, he engaged young John Banister, son of the famous naturalist, to live at Westover and manage the plantation while he was in England. Of the gardens, Beverley wrote (1705): "Colonel Byrd, in his garden, which is the finest in that country, has a summer house set round with the

Indian honeysuckle, which all the summer is continually full of sweet flowers in which these birds [hummingbirds] delight exceedingly. Upon these floweres I have seen ten or a dozen of these beautiful creatures together, which sported about me so familiarly that with their little wings they often fanned my face." Byrd added that "one can take them into his hands and let them fly. They always come back . . . We cover exceptionally beautiful boxes and jewelry cases with them, and paste them on in flower-and figure shapes" (Beatty, 1932 fide Ewan & Ewan, 1970).

In "A Journey to the Land of Eden in the Year 1733" (Van Doren, 1928), Byrd described a return trip from Westover to the North Carolina properties. Beginning in mid-September, he was accompanied by John Banister, "the kind companion of my travels." On that journey, much of which was in Virginia, Byrd's accounts refer to woodpeckers' habits of piercing the bark of sugar trees "for the pleasure of the sweet juice" (probably the Yellow-bellied Sapsucker, *Sphyrapicus varius*), and to a doe lost "had not the ravens [*Corvus corax*], by their croaking, conducted us to the thicket where she fell."

At the time of his death on 26 August 1744, he was often called the Black Swan (presumably because of his aesthetic interests), was President of the Council of State, and was recognized as the most distinguished and experienced of Virginia's elder statesmen. He owned 179,000 acres of the best land in the colony, hundreds of slaves, herds of cattle, mills, and sloops.

The Dividing Line Expeditions

A quarrel had existed for many years between North Carolina and Virginia as to the dividing line between the two states, so in 1727 King George II ordered the governors to appoint commissioners to survey and make definite the line. Byrd was appointed one of the three Virginia commissioners. The two commissions met at Currituck Inlet on the coast on 5 March 1728, and, with surveyors and other personnel, began to survey the dividing line. Along the way, the commissioners marched around the Dismal Swamp while the survey party had to hack its way through the swamp. By 8 April, 73 miles had been covered, so the commissioners decided to halt at that point and resume operations in Septem-

ber. The survey continued on 21 September, and on 26 October Byrd decided that they had gone far enough to satisfy His Majesty's commission, having traveled 241 miles.³ Of Byrd's two accounts of the expedition, the "Secret History" (Boyd, 1929) contains more natural history details than Byrd's "History of the Dividing Line" in 1841 (see also Bassett, 1901). Both are invaluable sources of the social history of the time and describe the frontier life and natural resources along the dividing line.

Throughout the expeditions, Byrd's diary entries contained information on plants that might be used for medicinal purposes and animals that could be used for food. Thus, many of the daily entries contain references to wild turkeys, white-tailed deer, and black bears shot for food. Wild turkeys, some "weighing upwards of 40 pounds," are mentioned on 17 days, indicating their abundance along the way. Byrd also recounts the turkey's habit of roosting in high trees, its ability to run fast "like the Ostrich," spring gobblers "by which the Language wherein they make Love," and sharpness of their spurs.

Other birds reported by Byrd on the expeditions were:

- Wild Geese (species unknown, but probably mostly Canada Geese, *Branta canadensis*). On 15 October—"Now the Weather grew cool, the Wild Geese began to direct their Flight this way from Hudson's Bay, and the Lakes that lay North-west of us. They are very lean at their first coming, but fatten soon upon a Sort of Grass that grows on the Shores and Rocks of this River [the Dan]. The Indians call this Fowl Cohunks, from the hoarse Note it has, and begin the year from the coming of the Cohunks, which happens in the Beginning of October. These Wild Geese are guarded from cold by a Down, that is exquisitely soft and fine, which makes them much more valuable for their Feathers than for their Flesh, which is dark and coarse." And on 28 October, as they proceeded to the Roanoke River, "there are many rocks in the river thereabouts, on which grows a kind of water grass, which the wild geese are fond of, and resort to it in great numbers."

- Blue-winged Teal (*Anas cyanoptera*). On 4 October is the entry: "at the distance of five miles we forded a stream to which we gave the name of Bluewing creek, because of the great number of those fowls that then frequented it."

³ From a map submitted by the Commissioners, the distance appears to be more on the order of 170 miles.

● "Cranes" probably Sandhill Cranes (*Grus canadensis*). On 9 October—"A great Flock of Cranes flew over our Quarters, that were exceeding Clamorous in their Flight. They seem to steer their Course towards the South (being Birds of Passage) in Quest of Warmer Weather. They only took this Country in their way, being as rarely met with, in this part of the World, as a Highwayman or a Beggar."

A later mention of cranes on 15 October probably refers to herons and egrets: "Six miles further is Crane creek, so named from its being the rendezvous of great armies of cranes, which wage a more cruel war at this day, with the frogs and the fish . . ."

● Turkey Vulture (*Cathartes aura*). As the surveyors were entering the Dismal Swamp on 17 March, Byrd noted that "neither Bird no Beast . . . came into view. Not even a Turkey-Buzzard will venture to fly over it . . ." But on 21 March he wrote that the surveyors "espied a Turkey-Buzzard, that flew prodigiously high to get above the Noisome Exhalations that ascend from that filthy place [a cedar-swamp]." He also noted later that carcasses of deer and bear would become "a Certain Prey to the Turkey Buzzards." Then, on 5 October they crossed "Turkey-Buzzard River, from the great numbers of those unsavoury Birds that roost on the tall Trees growing near its banks."

● Ruffed Grouse (*Bonasa umbellus*). On 9 October "Our Indian kill'd nothing all day but a Mountain Partridge [sic], which a little resembled the common Partridge in the Plumage, but was near as large as a Dunghill Hen. These are very frequent towards the Mountains, tho' we had the fortune to meet with very few. They are apt to be Shy, and consequently the Noise of so great a Number of People might easily Scare them away from our Sight."

● Carolina Paroquet. On 26 March—"The Truth is, there is one Inconvenience that easily discourages lazy people from making This improvement [planting orchards]: very often, in Autumn, when the Apples begin to ripen, they are visited with Numerous Flights of paraqueets, that bite all the Fruit to Pieces in a moment, for the sake of the Kernels. The Havock they make is Sometimes so great, that whole Orchards are laid waste in Spite of all the Noises that can be made, or Mawkins that can be dresst up, to fright 'em away. These Ravenous Birds visit North Carolina only during the warm Season, and so soon as the Cold begins to come on, retire back towards the Sun. They rarely Venture so far

North as Virginia, except in a very hot Summer, when they visit the most Southern Parts of it. They are very Beautiful; but like some other pretty Creatures, are apt to be loud and mischievous."

● Passenger Pigeon. On 19 October—"The men's Mouths water'd at the Sight of a Prodigious Flight of Wild Pigeons, which flew high over our Heads to the Southward. The Flocks of these Birds of Passage are so amazingly great, Sometimes, that they darken the Sky; nor is it uncommon for them to light in such Numbers on the Larger Limbs of Mulberry-Trees and Oaks as to break them down. In their Travels they make vast Havock among the Acorns and Berries of all Sorts, that they wast whole Forrests in a short time, and leave a Famine behind them for most other Creatures; and under Some Trees where they light, it is no Strange thing to find the ground cover'd three Inches thick with their Dung. These Wild Pigeons commonly breed in the uninhabited parts of Canada, and as the Cold approaches assemble their Armies and bend their Course Southerly, Shifting their Quarters, like many of the Winged kind, according to the Season. But the most remarkable thing in their Flight, as we are told, is that they never have been observ'd to return to the Northern Countries the same way they came from thence, but take quite another Rout, I suppose for their better Subsistence. In these long Flights they are very lean, and their Flesh is far from being white or tender, tho' good enough upon a March, when Hunger is the sauce, and makes it go down better than Truffles and Morels wou'd do."

● Crows (*Corvus* sp.). The only reference that I have found to crows in any of Byrd's writings is an entry on 22 October when they were "encouraged by the good omen of seeing the crows fly over their heads."

Byrd's accounts also contain references to bears, panthers, wolves, buffaloes, beavers, elks, rattlesnakes, and sturgeons.

Based on information gained during the survey, Byrd devised elaborate plans for constructing canals to drain the Dismal Swamp (Swem, 1922). The principal advantage in draining the swamp, according to Byrd, was to provide "the fittest soil in the world for producing hemp." His description of the swamp included vivid accounts of the "quagmire," "overgrown with weeds," with rising "noxious vapours [that] infect the air...giving agues and other distempers to the neighboring inhabitants," where "no beast or bird approaches, nor so much

as an insect or reptile," "nor indeed do any birds care to fly over it."⁴ Although Byrd later abandoned the plans, they were revived after his death but were never implemented.

The Byrd Diaries

For most of his life Byrd was a diarist. His shorthand diaries that have come to light cover the periods 6 February 1709 to 29 September 1712 (Wright & Tinling, 1941), 13 December 1717 to 19 May 1721 (The London Diary, Wright & Tinling, 1958), and 10 August 1739 to 31 August 1741 (Woodfin & Tinling, 1942).

Each daily entry is usually a short paragraph, and follows a general format: time of arising; reading in Hebrew, Greek, Latin, French; "said my prayers" or "neglected to say"; ate a very sparse breakfast, often only boiled milk; "I danced my dance," evidently calisthenics; morning activities, such as business conferences or writing letters. After an early afternoon dinner, he read, and in the late afternoon or evening, visited servants' quarters where he prescribed remedies to the sick ("bark"-cinchona bark, the source of quinine, blood-letting, purge, sage, snakeroot) or walked about the plantation, often with his wife. On one such occasion, he was "entertained with seeing a hawk which had taken a small bird pursued by another hawk, so that he was forced to let go his prey." Sometimes he took his bow and arrow to shoot at partridges or squirrels. Evenings often included social affairs followed by entries such as "I said [or did not say] my prayers and had good health, good thoughts, and good humor, thanks be to God Almighty."

For dinner meals, he frequently mentioned specific meat courses, these including birds, veal, beef, sturgeon, pork, mutton, eggs, shoat, opossum, and venison. Birds eaten at the dinner meal were:

- "swan." Mentioned once (Nov.).
- "goose" or "wild goose." No common names are given; some might have been domesticated. Mentioned for nearly every month, but most frequently in November and December.
- "blue wing" or Blue-winged Teal. Mentioned 15

times (23 Aug.–8 Oct.)

- sheldrake or canvasback (*Aythya valisineria*). Mentioned twice (Jan., Nov.).

- "wild duck." Mentioned frequently for fall and winter months. January 1741 was exceptionally cold: "some ducks froze to death."

- common snipe (*Capella gallinago*). Mentioned three times (Mar., Aug.)

- "turkey" or Wild Turkey (*Meleagris gallopavo*). A popular dinner item, mentioned 43 times, most frequently in the winter. We do not know whether any turkeys were of the domesticated variety. Certainly Byrd kept and bred chickens and peacocks; one of each was given to Mrs. Harrison in March 1720.

- "partridge," probably the Bobwhite (*Colinus virginianus*). Mentioned for all months except late spring and summer.

- "pigeons" which were probably Passenger Pigeons. Mentioned 55 times, for all months except November and December and chiefly in May and August. Some of the pigeons eaten in the summer might have been Rock Doves (*Columba livia*) because on 11 June 1720 he wrote that a storm had "damaged the pigeonhouse...."

Associations with Contemporary Naturalists

Probably because of his stature in Virginia society, hospitality, and interests in gardens, natural history, and herbal medicines, Byrd became acquainted with many contemporary naturalists, chiefly botanists. Often they would visit Westover for exchange of ideas and tours of his famous gardens. Later he corresponded with these naturalists and sometimes sent plant samples for their use or identification.

Mark Catesby (1682–1749)⁵

Mark Catesby made his first voyage to the New World from his English home, arriving in Virginia in 1712 and remaining for seven years, all the while familiarizing himself with the new plants and animals that everywhere confronted him (Wright & Tinling, 1941). Catesby's sister, Elizabeth, was married to Dr. William

⁴ Today, we know that many species of birds, from waterbirds to raptors to songbirds, breed in or migrate through the Dismal Swamp (Brooke Meanley in Simpson, 1990).

⁵ fide Feduccia (1985); scholars differ on these dates.

Cocke, Secretary of Virginia and Byrd's friend. Dr. Cocke first brought Catesby to Westover on 30 April 1712. Although Byrd's diary for that period ends in September 1712, over the five-month period Catesby visited Byrd on at least 26 occasions. Through the influence of Byrd and others, Catesby won rapid acceptance among Virginians.

Catesby was the first describer of most of our familiar birds, although such credits are usually given to Carolus Linnaeus (Stone, 1905). Feduccia (1985) notes that Byrd "...brought Catesby into contact with the flora and fauna of Virginia..." and Berkeley & Berkeley (1963) suggested that Byrd was "the ideal person to advise Catesby" in his early explorations. Considering the close association between Catesby and Byrd for seven years, it is likely that Byrd introduced Catesby to many of the common colonial birds even though his interests were primarily botanical. For example, no doubt Catesby's first introduction to the Ruby-throated Hummingbird (*Archilochus colubris*) is found in Byrd's diary entry of 24 May 1712, a month after Catesby's arrival in the New World: "In the afternoon the daughter, Mr. Catesby, and I went into the swamp to see the nest of a humming bird and the Doctor [Cocke] followed along. However we found a nest with one young and one egg in it." Thereafter, plantation walks and other local journeys between them were frequent and included observations of wildlife (the diary contains references to Catesby killing snakes and a bear cub). Byrd's correspondence with Catesby continued until 1737, when he insisted to Catesby that rattlesnakes charm their potential prey by a "steady Look."

After additional trips to the Carolinas and Florida, Catesby completed his renowned *Natural History of Carolina, Florida, and the Bahama Islands*, the first reliable account of North American natural history, including birds (Catesby, 1731–1743) for which Byrd was a patron. For his *Natural History*, Catesby has been called the "Founder of American Ornithology" and "Colonial Audubon" (Frick & Stearns, 1961).

John Banister (1650–1692)

John Banister, the famed early Virginia naturalist and botanist, was killed in 1692 when William Byrd II was 18 years old and living abroad. William Byrd I, interested in exploiting natural resources, had been a patron of Banister as early as 1687 and was probably influential in persuading Banister to come to Virginia (Ewan & Ewan, 1970). Banister probably received

information from Byrd I about Indian life, plants, soils, and animal life. In turn, the reputation of Byrd I was enhanced by his association with John Banister.

Banister's son, John, became a frequent companion and employee of Byrd II. In Byrd's "Journey to the Land of Eden 1733," he noted on September 11: "I met my Friend, Mr Banister, who was to be the kind Companion of my Travels," and whom he mentioned as "one of the four gentlemen of the party aside from the woodsmen, Negroes, and Indians who made up the expedition."

About 1697, Byrd proposed to the Royal Society and to Sir Hans Sloane, a distinguished British physician and botanist, that a "Fitt person" be sent as a philosopher-naturalist to complete a Natural History of the Colony. Instead, the Society sent William Vernon to Maryland, so Virginia still lacked a naturalist.

John Bartram (1699–1777)

Little is known about Byrd's association with John Bartram (the Colonial Quaker who became known as "His Majesty's Botanist for North America") because thus far no Byrd diary has been found for 1738. In their description of Bartram's travels from Lake Ontario to Florida, Berkeley & Berkeley (1982) recount some of the Bartram-Byrd meetings. As Bartram searched for seeds and new plants on his journey into Virginia, his contacts in Williamsburg urged him to visit Col. William Byrd at Westover because of his renowned gardens, library, and friendship with the famed Sir Hans Sloane of the Royal Society. There, Bartram found another person who shared his intense interest in natural history. Bartram and Byrd inspected the fine garden, with its flower beds, vegetable plots, fruit trees, grape arbors, and greenhouse containing orange trees in fruit. The two also shared interests in prescribing natural remedies for diseases, the use of snakeroot and ginseng, for example. About 1739, Bartram wrote to Byrd about his experiments in crossing white-flowered and red-flowered individuals of *Lychnis*, a campion, hoping that his work would "open a gate into a very large field of experimental knowledge." Other than their shared interests in nature, we know nothing about any exchange of information about animals, especially birds.

John Clayton (1694–1773)

A distant relative of the scientifically-minded Rev. John Clayton (1657–1725), this John Clayton was an affluent farmer-planter, serving as Clerk of Gloucester

County until his death (Berkeley & Berkeley, 1963). His father and Byrd had enjoyed a long association, including visits at Westover, and it is likely that Byrd, his wife's brother-in-law John Custis, and Mark Catesby all influenced the development of young John Clayton into a botanist (Berkeley & Berkeley, 1963). Clayton developed his own botanical garden and corresponded with Byrd and many others about seeds and plants. He became well known to members of the natural history circle on both sides of the Atlantic, especially in his contribution to *Flora Virginica* published in 1739 and 1743.

"William Byrd's Natural History of Virginia"

After unsuccessful attempts to attract Swiss settlers to the Land of Eden, Byrd sold over 33,000 acres to a Swiss agent, Samuel Jenner. In turn, Jenner, in a further attempt to interest his countrymen, published a book in 1737 called "Neu-gefundenes Eden," written in German and allegedly authored by William Byrd. The German version was translated into English and published as "William Byrd's Natural History of Virginia or the Newly Found Eden" by Richmond C. Beatty & William J. Mulloy (1940). These editors insisted (p. xxviii) that "This volume contains the most detailed account in existence of the natural history of colonial Virginia."

The history of this book has been closely scrutinized by scholars who questioned the assertion that William Byrd II was its author. These scholars pointed out that the book lacked the literary qualities of Byrd's prose and that a naturalist better acquainted with details than Byrd had supplied the natural history information.

Critics, such as P. G. Adams (1957), compared "Byrd's Natural History" with accounts in John Lawson's "A New Voyage to Carolina" (1709), and found a striking similarity between the language in the two books (see also McAtee, 1955b). Adams was convinced (1957, 1962) that the author of "Byrd's Natural History" had plagiarized Lawson. The current opinion is, despite the insistence of Beatty and Mulloy, that Samuel Jenner, and not William Byrd, was the principal if not sole author of what is now known as "William Byrd's Natural History of Virginia," and that most of the accounts of the flora and fauna (including those of birds) were in fact taken and reworded from Lawson's book. Adams also points out that some of the later sections of "Byrd's Natural History" were taken from "The History of the Present

State of Virginia," written by Byrd's cousin, Robert Beverley (1705). Thus, most if not all of "Byrd's Natural History" pertained to North Carolina and not Virginia.

Summary

William Byrd II of Westover was known as a wealthy landowner and political leader of 18th century Virginia. He had interests in natural products, their curative powers, and frontier natural history. In describing the natural history of colonial Virginia, principally through his diaries, Byrd identified about 20 species of birds and often described their distinctive behavioral traits. For these observations and descriptions, Byrd should be recognized for his contributions to early colonial natural history.

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Apanteles congregatus (Say) (Hymenoptera: Braconidae), a Newly Recorded Parasite of *Tolyte* sp. (Lepidoptera: Lasiocampidae)

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Apanteles congregatus (Say) is often mentioned in the literature as a parasite of the tomato hornworm, *Manduca quinquemaculata* (Hawthorn), and the tobacco hornworm, *M. sexta* (L.) (Gilmore, 1938). Krombein et al. (1979) list 15 species of Lepidoptera that *A. congregatus* is known to parasitize. These host species represent two families, Sphingidae and Noctuidae.

On 25 July 1994, a larva referable to the genus *Tolyte* (Lasiocampidae) was collected in the Horticulture Garden of Virginia Polytechnic Institute and State University in Blacksburg, Virginia. 30 pupal cocoons of a braconid wasp were observed attached to the caterpillar's dorsal side; after death of the host animal, the cocoons were removed and held until the adult wasps emerged. Both larva and wasps were initially identified at the VPI&SU Insect Identification Lab, and subsequently referred to the Systematic Entomology Lab, USDA-ARS, for verification. The parasites were confirmed as *A. congregatus* and the larva as *Tolyte* (identification of these animals to species requires more information on life history and phenology than was available).

This is thought to be the first record of *A. congregatus* parasitizing a species of *Tolyte* or any member of

the Lasiocampidae. Further study is needed to determine the prevalence of this host-parasite relationship.

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